

Dialog Information Services' DIALNET  
-2030:01-004-  
Enter Service: dialog

DIALNET: call connected

DIALOG INFORMATION SERVICES  
PLEASE LOGON:  
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ENTER PASSWORD:  
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Welcome to DIALOG  
Dialog level 23.02.5A

Last logoff 20jun90 09:35:17  
Logon file001 20jun90 13:08:11

File 1:ERIC \_ 66-90/MAY.

Set	Items	Description
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b med@come

20jun90 13:08:24 User208700 Session A39.1		
\$0.12	0.004 Hrs	File1
\$0.12	Estimated cost	File1
\$0.04	Dialnet	
\$0.16	Estimated cost this search	
\$0.16	Estimated total session cost	0.004 Hrs.

System:OS - DIALOG OneSearch

File 5:BIOSIS PREVIEWS\_69-90/MAY BA9001;RRM3901  
(C.BIOSIS 1990)

File 34:SCISEARCH \_ 1990 WK 1-23  
(COPR. ISI INC. 1990)

\* See also files 434 (1987-89), 433 (1980-86) & 432 (1974-79)  
\* Use 'BEGIN SCISEARC' to search all of SciSearch

File 434:SCISEARCH \_ 1987-1989  
(COPR. ISI INC. 1990)

\* See also file 34 (1990- ), 433 (1980-86) & 432 (1974-79)  
\*\*\* SORTS ARE NOT WORKING \*\*\*

File 433:SCISEARCH - 1980-1986  
(COPR. ISI INC. 1988)

\* See also file 34 (1990- ), 434 (1987-89) & 432 (1974-79)

File 432:SCISEARCH - 1974-1979  
(COPR. ISI INC. 1988)

\* See also file 34 (1990- ), 434 (1987-89) & 433 (1980-86)

File 48:SPORT DATABASE\_1977 - JUN 90  
(COPR. SIRC 1990)

File 72:EMBASE (EXCERPTA MEDICA)\_82-90/ISS24  
(COPR. ESP BV/EM 1990)

File 173:EMBASE (Excerpta Medica) 1974-79  
(Copr. ESP BV/EM 1984)

File 74:INTERNATIONAL PHARMACEUTICAL ABS. - 70-90/JUNE  
(COPR. ASHP 1990)

File 144:PASCAL\_1983 - 1990 MAR  
(C. INIST/CNRS 1990)

File 149:HEALTH PERIODICALS DATABASE\_1976-90/WEEK 24  
(COPR. IAC 1990)

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\* Format 3 is now .20 for types and .40 for prints \*  
\* See ?RATES149 for more details \*  
\*\*\*\*\*

File 155:MEDLINE 66-90/AUG (9008W2)

File 157:AIDSLINE - 1980-90/JULY

File 159:Cancerlit - 1963-90/June

File 160:SMOKING AND HEALTH - 70-89/Dec

\*\*\*\*\*

The problems in file 160 have been corrected now.

Thank you for your patience.

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File 218:Nursing & Allied Health (CINAHL)\_83-90/May  
(c. CINAHL Corp. 1990)

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File 219:Clinical Abstracts - Jan 81-89/Aug  
(Corp. Reference & Index Svcs.Inc.)

File 265:FEDERAL RESEARCH IN PROGRESS - MAY 1990

File 295:WORLD TRANSLATIONS INDEX 1984 - MAY 1990  
(COPR. ITC 1990)

Set	Items	Description
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s endothel?/ab and vascular/ab and growth(w)factor/ab and (brain or pituit? or follic?)/a  
b

Processing

>>>Term "AB" is not defined in one or more files

Processing

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Processing

Processing

Processing

101274	ENDOTHEL?/AB
216915	VASCULAR/AB
710953	GROWTH/AB
488593	FACTOR/AB
77075	GROWTH/AB(W)FACTOR/AB
414912	BRAIN/AB
0	PIFOLLIC?/AB

S1	499	ENDOTHEL?/AB AND VASCULAR/AB AND GROWTH(W)FACTOR/AB AND (BRAIN OR PIFOLLIC?)/AB
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s endothel?/ti and vascular/ti and growth(w)factor/ti and (brain or pituit? or follic?)/ti  
?ti

Processing

Processing  
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Processing

Best Available Copy

57246 ENDOTHEL?/TI  
127596 VASCULAR/TI  
447175 GROWTH/TI  
315018 BRAIN/TI  
84651 PITUIT?/TI  
36867 FOLLIC?/TI  
S2 27 ENDOTHEL?/TI AND VASCULAR/TI AND GROWTH/TI AND (BRAIN OR  
PITUIT? OR FOLLIC?)/TI

s s2 not py=1990

>>>One or more prefixes are unsupported

>>> or undefined in one or more files.

27 S2  
539768 PY=1990  
S3 27 S2 NOT PY=1990

sdss3

...completed examining records

S4 6 RD S3 (unique items)

t s4/7/1-6

4/7/1 (Item 1 from file: 5)

0020844397 BIOSIS Number: 89036666

PITUITARY FOLLICULAR CELLS SECRETE BOTH VASCULAR ENDOTHELIAL GROWTH  
FACTOR AND FOLLISTATIN

GOSPODAROWICZ D; LAU K

CANCER RES. INST., UNIV. CALIF. MED. CENT., SAN FRANCISCO, CALIF. 94143.

BIOCHEM BIOPHYS RES COMMUN 165 (1). 1989. 292-298. CODEN: BBRCA

Language: ENGLISH

Follistatin, a hormone which acts to suppress the release of  
follicle-stimulating hormone (FSH) by pituitary-derived gonadotrophs, has  
previously been identified only in the liquor folliculi of ovarian  
follicles. By microsequencing of fractions derived from conditioned medium,  
we show here that bovine pituitary-derived folliculo stellate cells are  
also capable of producing and secreting this hormone. These results suggest  
that folliculo stellate cells may serve as a source of follistatin within  
the pituitary itself and that the regulation of FSH release from the  
pituitary could therefore involve a paracrine mechanism.

4/7/2 (Item 2 from file: 5)

0019592323 BIOSIS Number: 88048355

PITUITARY FOLLICULAR CELLS SECRETE A NOVEL HEPARIN-BINDING GROWTH FACTOR  
SPECIFIC FOR VASCULAR ENDOTHELIAL CELLS

FERRARA N; HENZEL W J

DEP. OF PHARMACOLOGICAL SCI., GENENTECH INC., 460 POINT SAN BRUNO BLVD.,  
SOUTH SAN FRANCISCO, CALIF. 94080.

BIOCHEM BIOPHYS RES COMMUN 161 (2). 1989. 851-858. CODEN: BBRCA

Language: ENGLISH

A growth factor vascular endothelial cells was identified in the media  
conditioned by bovine pituitary follicular cells and purified to  
homogeneity by a combination of ammonium sulfate precipitation,  
heparin-sepharose affinity chromatography and two reversed phase HPLC  
steps. The growth factor was a cationic, heat stable and relatively acid  
stable protein and had a molecular weight, as assessed by silver-stained  
SDS-PAGE gel, of .apprx. 45,000 under nonreducing conditions and .apprx.  
23,000 under reducing conditions. The purified growth factor had a maximal  
mitogenic effect on adrenal cortex-derived capillary endothelial cells at  
the concentration of 1-1.2 ng/ml (22-26 pM). Further characterization of  
the bioactivity of the growth factor reveals that it exerts mitogenic  
effects also on vascular endothelial cells isolated from several districts  
but not on adrenal cortex cells, lens epithelial cells, corneal endothelial  
cells, keratynocytes or BHK-21 fibroblasts, indicating that its target cell  
specificity is unlike that of any previously characterized growth factor.  
Microsequencing reveals a unique N-terminal amino acid sequence. On the

factor vascular endothelial growth factor (VEGF).  
Best Available Copy

4/7/3 (Item 3 from file: 5)  
0016053482 BIOSIS Number: 81022420  
PURE BRAIN-DERIVED ACIDIC FIBROBLAST GROWTH FACTOR IS A POTENT ANGIOGENIC  
VASCULAR ENDOTHELIAL CELL MITOGEN WITH SEQUENCE HOMOLOGY TO INTERLEUKIN 1  
THOMAS K A; RIOS-CANDELORE M; GIMENEZ-GALLEGO G; DISALVO J; BENNETT C;  
RODKEY J; FITZPATRICK S  
DEP. BIOCHEM., MERCK INST. THERAPEUTIC RES., MERCK SHARP DOHME RES. LAB.,  
RAHWAY, N.J. 07065.  
PROC NATL ACAD SCI U S A 82 (19). 1985. 6409-6413. CODEN: PNASA  
Language: ENGLISH

Pure bovine brain-derived acidic fibroblast growth factor is a very  
potent mitogen for vascular endothelial cells in culture and, in the  
presence of heparin, induces blood vessel growth in vivo. Partial amino  
acid sequence determinations confirm that this mitogen is a unique protein  
having amino acid sequence homology with human interleukin 1.

4/7/4 (Item 4 from file: 5)  
0015212030 BIOSIS Number: 79102026  
EFFECTS OF AN EXTRACT OF HUMAN BRAIN CONTAINING GROWTH FACTOR ACTIVITY ON  
THE PROLIFERATION OF HUMAN VASCULAR ENDOTHELIAL CELLS IN PRIMARY CULTURE  
KLEIN-SOYER C; STIERLE A; BOUDERBALA B; CAZENAVE J-P  
CENT. TRANSFUSION SANGUINE, 10, RUE SPIELMAN, 67085 STRASBOURG CEDEX, FR.  
BIOL CELL 52 (1 PART A). 1984 (RECD. 1985). 9-20. CODEN: BCELD  
Language: ENGLISH

Lesions of vascular human EC [endothelial cell] play an important role in  
the development of thrombi and atherosclerosis. The factors which control  
the repair of vascular lesions are not well known. In addition, they are  
difficult to study because vascular EC from large vessels are fastidious  
cells to grow in tissue culture. Some of the factors that may be important  
in human umbilical vein EC growth in primary culture were investigated.  
Because of reported species differences in EC culture, it was decided to  
culture human EC only in the presence of biological culture reagents of  
human origin. Human umbilical vein EC, at low seed density, was grown to  
confluency on a human FN matrix or on human ECM [extracellular matrix]  
providing the medium was supplemented with a high concentration (30%) of  
human sera. The optimal proliferation of EC (even when seeded at clonal  
density) is obtained if HBE [human brain extract] is added. HBE cannot  
completely replace serum, but EC proliferated to a similar extent whether  
they were grown on FN or on ECM in the presence of 30% human serum or 10%  
human serum plus HBE. Thus, HBE contains a growth factor activity for human  
EC which stimulates cell growth and DNA replication. Further work is needed  
to purify HBE and to compare it to other endothelial cell growth factors  
isolated from bovine brain and bovine eye.

4/7/5 (Item 5 from file: 5)  
0015132718 BIOSIS Number: 28068549  
STIMULATION OF CULTURED HUMAN VASCULAR ENDOTHELIAL CELL PROLIFERATION BY  
GROWTH FACTORS FROM HUMAN BRAIN HEPARIN AND THROMBIN  
DANILOV S M; ALLIKMETS E Y; MARTYNOV A V  
INST. EXP. CARDIOL., USSR CARDIOL. RES. CENT., MOSCOW, USSR.  
24TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR CELL BIOLOGY, KANSAS  
CITY, MO., USA, NOV. 12-16, 1984. J CELL BIOL 99 (4 PART 2). 1984. 274A.  
CODEN: JCLBA  
Language: ENGLISH

4/7/6 (Item 6 from file: 5)  
0014233521 BIOSIS Number: 77066505  
BOVINE BRAIN AND PITUITARY FIBROBLAST GROWTH FACTORS COMPARISON OF THEIR  
ABILITIES TO SUPPORT THE PROLIFERATION OF HUMAN AND BOVINE VASCULAR  
ENDOTHELIAL CELLS  
GOSPODAROWICZ D; CHENG J; LIRETTE M  
CANCER RES. INST., UNIV. CALIFORNIA MED. CENT, SAN FRANCISCO, CALIF.  
94143.

The mitogenic effects of brain and pituitary fibroblast growth factors (FGF) on vascular endothelial cells derived from either human umbilical vein or bovine aortic arch were compared. Both brain and pituitary FGF are mitogenic for low density human umbilical endothelial (HUE) cell cultures maintained on either fibronectin- or laminin-coated dishes or on biomatrices produced by cultured cells such as bovine corneal endothelial cells or the [mouse] teratocarcinoma cell line PF-HR-9. Pituitary FGF triggered the proliferation of HUE cells at concentrations as low as 0.25 ng/ml, with a half-maximal response at 0.55 ng/ml and optimal effect at 2.5 to 5 ng/ml. It was 50,000-fold more potent than commercial preparations of endothelial cell growth factor and 40 times more potent than commercial preparations of pituitary FGF. Similar results were observed when the effect of pituitary FGF was tested on low density cultures of adult bovine aortic endothelial cells. When the activity of brain and pituitary FGF on low density HUE cell cultures was compared, both mitogens were active. To confirm the presence in brain extract of both acidic and neutral, as well as of basic mitogen, for HUE cells, brain tissues were extracted at acidic (4.5), neutral (7.2) and basic (8.5) pH. The 3 types of extracts were equally potent in supporting the proliferation of either HUE or adult bovine aortic endothelial cells. When the various extracts were absorbed at pH 6.0 on a carboxymethyl Sephadex C-50 column, the neutral and basic extracts had an activity after adsorption similar to that of unadsorbed extracts. In contrast, extracts prepared at pH 4.5 lost 90-95% of their activity which was recovered in the adsorbed fraction containing FGF.

log pdf

Dialog Information Services' DIALNET  
-2030:01-020-  
Enter Service: dialog

DIALNET: call connected

DIALOG INFORMATION SERVICES  
PLEASE LOGON:  
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ENTER PASSWORD:  
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Welcome to DIALOG  
Dialog level 23.02.5A

>>> Cost Estimate prior to Disconnect, information only  
>>> 20jun90 09:23:26 User208700 Session A38.3  
>>> \$2.77 0.033 Hrs File5  
>>> \$2.77 Estimated cost File5  
>>> \$0.33 Dialnet  
>>> \$3.10 Estimated cost this search  
>>> \$3.29 Estimated total session cost 0.050 Hrs.  
>>>

Last logoff 20jun90 08:57:07  
Reconnected in file 5 20jun90 09:26:55

File 5:BIOSIS PREVIEWS\_69-90/MAY BA9001;RRM3901  
(C.BIOSIS 1990)

Set	Items	Description
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s an=85055227		
S3	1	AN=85055227
t s8#7/1		

3/7/1  
0018109758 BIOSIS Number: 85055227  
VASCULAR ENDOTHELIAL CELL GROWTH FACTOR IN WOUND HEALING THE SECOND  
REPORT THE SIGNIFICANCE OF EXTRACELLULAR MATRIX COMPOSED BY ENDOTHELIAL  
CELLS  
SATO T; ARAI K; AIDA T; ASANO G  
DEP. DERMATOL., NATL. DEFENSE MED. COLL., TOKOROZAWA, SAITAMA 359, JPN.  
J NATL DEF MED COLL 12 (2). 1987. 65-72. CODEN: BIDZD  
Language: JAPANESE

Morphological studies on the proliferative differentiation of vascular endothelial cells were performed on purpose to elucidate the mechanism of endothelial growth during the wound healing process. As previously reported, proliferation of the vascular endothelial cells incubated in the medium conditioned with fibroblasts, particularly with keloid-derived myofibroblasts, was shown to be substantially promoted. In addition occurrence of cell projections and junctions, formation of vacuoles and the basement membrane and increased synthesis of GAG and fibronectin were observed suggesting that the cells differentiated into a typical endothelium. Taking into account these findings, the basement membrane and its main component-GAG and fibronectin together with the cell growth factor originated from the platelets and macrophages appear to play an important role in the vascular endothelial cell growth. With regard to enhancement of vascular endothelial proliferation it is of interest of note roles of the mesenchymal cells mediating GAG and fibronectin synthesis.

s an 85012770  
S4 0 AN 85012770 **Best Available Copy**

s an=85012770  
S5 1 AN=85012770  
t s5/7/1

5/7/1  
0018035912 BIOSIS Number: 85012770

HUMAN VASCULAR SMOOTH MUSCLE CELLS BOTH EXPRESS AND RESPOND TO  
HEPARIN-BINDING GROWTH FACTOR I ENDOTHELIAL CELL GROWTH FACTOR  
WINKLES J A; FRIESEL R; BURGESS W H; HOWK R; MEHLMAN T; WEINSTEIN R;  
MACIAG T

LAB. MOL. BIOL., JEROME H. HOLLAND BIOMED. RES. LAB., AM. RED CROSS,  
15601 CRABBS BRANCH WAY, ROCKVILLE, MD. 20855, USA.

PROC NATL ACAD SCI U S A 84 (20). 1987. 7124-7128. CODEN: PNASA  
Language: ENGLISH

The control of vascular endothelial and smooth muscle cell proliferation is important in such processes as tumor angiogenesis, wound healing, and the pathogenesis of atherosclerosis. Class I heparin-binding growth factor (HBGF-I) is a potent mitogen and chemoattractant for human endothelial cells in vitro and will induce angiogenesis in vivo. RNA gel blot hybridization experiments demonstrate that cultured human vascular smooth muscle cells, but not human umbilical vein endothelial cells, express HBGF-I mRNA. Smooth muscle cells also synthesize an HBGF-I-like polypeptide since (i) extract prepared from smooth muscle cells will compete with <sup>125</sup>I-labeled HBGF-I for binding to the HBGF-I cell surface receptor, and (ii) the competing ligand is eluted from heparin-Sepharose affinity resin at a NaCl concentration similar to that required by purified bovine brain HBGF-I and stimulates endothelial cell proliferation in vitro. Furthermore, like endothelial cells, smooth muscle cells possess cell-surface-associated HBGF-I receptors and respond to HBGF-I as a mitogen. These results indicate the potential for an additional autocrine component of vascular smooth muscle cell growth control and establish a vessel wall source of HBGF-I for endothelial cell division in vivo.

s an=84020672  
S6 1 AN=84020672  
t s6/7/1

6/7/1  
0017543612 BIOSIS Number: 84020672

EVIDENCE OF THE PRESENCE OF A SPECIFIC VASCULAR ENDOTHELIAL GROWTH FACTOR  
IN FETAL BOVINE RETINA

CHEN C-H; CHEN S C  
WOODS 363, JOHNS HOPKINS UNIV., 600 N. WOLFE ST., BALTIMORE, MD 21205,  
USA.

EXP CELL RES 169 (2). 1987. 287-295. CODEN: ECREA  
Language: ENGLISH

The presence of a vascular endothelial cell growth factor (VEGF) in the retina was reported in a previous study. The present experiments show that VEGF exhibits a pronounced synergism with the serum-derived factor and the vascular endothelium (VE) effectors in stimulating the proliferation of vascular VE cells. VEGF shows a chromatographic multiplicity with the 25,000-D component as the smallest subunit. Mg<sup>2+</sup> is the specific divalent cation that retains the VEGF molecule in the aggregated form and enhances the activity, both total and specific. In addition, VEGF is highly specific for endothelial cells and is distinctly different from FGF, EGF, and insulin in terms of molecular weight (MW) and cell specificity. Under our assay conditions, VEGF has no stimulatory effect on other cell lines examined, including lens epithelial cells, corneal epithelial cells, corneal keratocytes, Walker 256 carcinoma, and fibroblasts. These findings indicate that VEGF possesses characteristic properties not reported for other growth factors, and that VEGF is distinctly different from the growth factors isolated from the retina in other laboratories. The present study suggests that VEGF in the retina represents a new type of growth factor. The need to employ a highly defined assay condition could have eluded the detection of this factor in the retina.

s an=81079821

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S7 1 AN=81079821  
t s7/7/1

7/7/1

0016169405 BIOSIS Number: 81079821

A MACROPHAGE FACTOR THAT STIMULATES THE PROLIFERATION OF VASCULAR  
ENDOTHELIAL CELLS

OKABE T; TAKAKU F

THE THIRD DEP. OF INTERNAL MED., FAC. OF MED., UNIV. OF TOKYO, HONGO,  
TOKYO 113, JAPAN.

BIOCHEM BIOPHYS RES COMMUN 134 (1). 1986. 344-350. CODEN: BBRCA

Language: ENGLISH

Sarcoid macrophage-epithelioid cells have been shown to release a growth  
factor that stimulates the proliferation of vascular endothelial cells in  
vitro. In the presence of this factor, cultured endothelial cells can  
proliferate in a serum-free medium. Gel-chromatography on Sephadex G-75  
revealed a single peak of activity on endothelial cells. The molecular  
weight was estimated at 7,000-10,000. The activity was heat-labile and  
trypsin-sensitive, and did not adhere to heparin-Sepharose.

s an=81001510

S8 1 AN=81001510  
t s8/7/1

8/7/1

0016012052 BIOSIS Number: 81001510

A PLATELET FACTOR STIMULATING THE PROLIFERATION OF VASCULAR ENDOTHELIAL  
CELLS PARTIAL PURIFICATION AND CHARACTERIZATION

MIYAZONO K; OKABE T; ISHIBASHI S; URABE A; TAKAKU F

THIRD DEP. INTERN. MED., FAC. MED., UNIV. TOKYO, HONGO, BUNKYO-KU, TOKYO  
113, JPN.

EXP CELL RES 159 (2). 1985. 487-494. CODEN: ECREA

Language: ENGLISH

Platelets have been shown to contain a novel growth factor that  
stimulates the proliferation of vascular endothelial cells in vitro. The  
factor potently stimulated both DNA synthesis and proliferation rate in  
serum-deprived endothelial cells. Gel exclusion chromatography showed at  
least two peaks of activity on endothelial cells, the major peak being at  
an apparent molecular weight of 20,000. isoelectric focusing revealed that  
the pI of the factor was 4.0-4.8. It was absorbed to a column of DEAE ion  
exchange chromatography and eluted with a salt gradient. The factor was  
heat-labile and trypsin-sensitive. The activity was not destroyed by a  
reducing agent including dithiothreitol. This factor stimulated the  
proliferation of vascular endothelial cells but was not found to be  
inactive against normal rat kidney fibroblasts.

s an=79102026

S9 1 AN=79102026  
t s9/7/1

9/7/1

0015212030 BIOSIS Number: 79102026

EFFECTS OF AN EXTRACT OF HUMAN BRAIN CONTAINING GROWTH FACTOR ACTIVITY ON  
THE PROLIFERATION OF HUMAN VASCULAR ENDOTHELIAL CELLS IN PRIMARY CULTURE

KLEIN-SOYER C; STIERLE A; BOUDERBALA B; CAZENAVE J-P

CENT. TRANSFUSION SANGUINE, 10, RUE SPIELMAN, 67085 STRASBOURG CEDEX, FR.

BIOL CELL 52 (1 PART A). 1984 (RECD. 1985). 9-20. CODEN: BCELD

Language: ENGLISH

Lesions of vascular human EC [endothelial cell] play an important role in  
the development of thrombi and atherosclerosis. The factors which control  
the repair of vascular lesions are not well known. In addition, they are  
difficult to study because vascular EC from large vessels are fastidious  
cells to grow in tissue culture. Some of the factors that may be important  
in human umbilical vein EC growth in primary culture were investigated.  
Because of reported species differences in EC culture, it was decided to  
culture human EC only in the presence of biological culture reagents of  
human origin. The results showed that EC culture is sensitive to the



confluency on a human FN matrix or on human ECM [extracellular matrix] providing the medium was supplemented with a high concentration (30%) of human sera. The optimal proliferation of EC (even when seeded at clonal density) is obtained if HBE [human brain extract] is added. HBE cannot completely replace serum, but EC proliferated to a similar extent whether they were grown on FN or on ECM in the presence of 30% human serum or 10% human serum plus HBE. Thus, HBE contains a growth factor activity for human EC which stimulates cell growth and DNA replication. Further work is needed to purify HBE and to compare it to other endothelial cell growth factors isolated from bovine brain and bovine eye.

s an=77066505]

S10 1 AN=77066505

t s10/7/1

10/7/1

0014233521 BIOSIS Number: 77066505

BOVINE BRAIN AND PITUITARY FIBROBLAST GROWTH FACTORS COMPARISON OF THEIR ABILITIES TO SUPPORT THE PROLIFERATION OF HUMAN AND BOVINE VASCULAR ENDOTHELIAL CELLS

GOSPODAROWICZ D; CHENG J; LIRETTE N

CANCER RES. INST., UNIV. CALIFORNIA MED. CENT, SAN FRANCISCO, CALIF.

94143.

J CELL BIOL 97 (6). 1983. 1677-1685. CODEN: JCLBA

Language: ENGLISH

The mitogenic effects of brain and pituitary fibroblast growth factors (FGF) on vascular endothelial cells derived from either human umbilical vein or bovine aortic arch were compared. Both brain and pituitary FGF are mitogenic for low density human umbilical endothelial (HUE) cell cultures maintained on either fibronectin- or laminin-coated dishes or on biomatrices produced by cultured cells such as bovine corneal endothelial cells or the [mouse] teratocarcinoma cell line PF-HR-9. Pituitary FGF triggered the proliferation of HUE cells at concentrations as low as 0.25 ng/ml, with a half-maximal response at 0.55 ng/ml and optimal effect at 2.5 to 5 ng/ml. It was 50,000-fold more potent than commercial preparations of endothelial cell growth factor and 40 times more potent than commercial preparations of pituitary FGF. Similar results were observed when the effect of pituitary FGF was tested on low density cultures of adult bovine aortic endothelial cells. When the activity of brain and pituitary FGF on low density HUE cell cultures was compared, both mitogens were active. To confirm the presence in brain extract of both acidic and neutral, as well as of basic mitogen, for HUE cells, brain tissues were extracted at acidic (4.5), neutral (7.2) and basic (8.5) pH. The 3 types of extracts were equally potent in supporting the proliferation of either HUE or adult bovine aortic endothelial cells. When the various extracts were absorbed at pH 6.0 on a carboxymethyl Sephadex C-50 column, the neutral and basic extracts had an activity after adsorption similar to that of unadsorbed extracts. In contrast, extracts prepared at pH 4.5 lost 90-95% of their activity which was recovered in the adsorbed fraction containing FGF.

s an=70028591

S11 1 AN=70028591

t s11/7/1

11/7/1

0010236095 BIOSIS Number: 70028591

STIMULATION OF HUMAN VASCULAR ENDOTHELIAL CELL GROWTH BY A PLATELET DERIVED GROWTH FACTOR AND THROMBIN

ZETTER B R; ANTONIADES H N

DEP. SURG., CHILD. HOSP. MED. CENT., BOSTON, MASS. 02115, USA.

J SUPRAMOL STRUCT 11 (3). 1979 (RECD. 1980). 361-370. CODEN: JSPMA

Language: ENGLISH

Repair of a vascular wound is mediated by migration and subsequent replication of the endothelial cells that form the inner lining of blood vessels. The growth response of human umbilical vein endothelial cells (HuE) to 2 polypeptides transiently produced in high concentrations at the site of a wound was measured; the platelet-derived growth factor (PDGF) and the endothelial cell growth factor (ECGF) were both found to stimulate

mm diameter) in the center of a 16 mm tissue culture well in medium containing 20% human serum derived from platelet-poor plasma (PDS), no increase in cell number or colony size was observed. When the addition of 0.5 ng/ml partially purified PDGF, colony size increases and the number of cells after 8 days is 4.8 .times. 104. When human thrombin (1 .mu.g/ml) is added along with the PDGF, the cell number rises to 9.2 .times. 104. Thrombin alone stimulates no increase in cell number. Although partially purified PDGF stimulates endothelial cells maintained in PDS as well as those maintained in whole blood serum (WBS), pure PDGF is active only when assayed in medium that contains WBS and is supplemented with thrombin. These results suggest the existence of a 2nd class of platelet-derived factors that enable HuE cells to respond to the mitogenic activity of the purified platelet mitogen and thrombin.

s an=66000728

S12 1 AN=66000728

t s12/7/1

12/7/1

0008188231 BIOSIS Number: 66000728

CONTROL OF PROLIFERATION OF BOVINE VASCULAR ENDOTHELIAL CELLS

GOSPODAROWICZ D; MORAN J S; BRAUN D L

SALK INST. BIOL. STUD., P.O. BOX 1809, SAN DIEGO, CALIF. 92112, USA.

J CELL PHYSIOL 91 (3). 1977 377-386. CODEN: JCLLA

Language: ENGLISH

The effects of fibroblast growth factor (FGF) [bovine pituitary and brain] and epidermal growth factor (EGF) on the proliferation of bovine vascular endothelial cells was examined [in relation to the development of vascular disease after endothelial cell injury]. FGF induces the initiation of DNA synthesis and cell proliferation in cloned endothelial cells of at 50 ng/ml. EGF had no effect over the same range of concentrations. The mitogenic effect of FGF is blocked by a crude extract of cartilage. Platelet extract is also mitogenic for vascular endothelial cells although to a lesser extent than the purified FGF. Both EGF and FGF are mitogenic for vascular smooth muscle cells although EGF is less mitogenic than FGF at 100 ng/ml. The mitogenic effect of EGF and FGF on vascular smooth muscle is not blocked by the addition of a crude extract of cartilage, thus demonstrating the specificity of the chalone like effect of cartilage crude extract for endothelial cells.

log off

20jun90 09:35:16 User208700 Session A38.4

\$12.60 0.150 Hrs File5

\$4.77 9 Type(s) in Format 4

\$4.77 9 Types

\$17.37 Estimated cost File5

\$1.50 Dialnet

\$18.87 Estimated cost this search

\$18.87 Estimated total session cost 0.150 Hrs.

Logoff: level 23.02.5 A 09:35:17

DIALNET: call cleared by request

Enter Service:

BitCom V2.6 DIAL ID=DIALOG DESC=DIALOG -PTO 06/20/90 09:39 am  
ATDT9-359-2500  
CONNECT

Dialog Information Services' DIALNET  
-2030:01-006-  
Enter Service: dialog

DIALNET: call connected

DIALOG INFORMATION SERVICES  
PLEASE LOGON:  
\*\*\*\*\*  
ENTER PASSWORD:  
\*\*\*\*\*

Welcome to DIALOG  
Dialog level 23.02.5A

Last logoff 19jun90 15:07:53  
Logon file001 20jun90 08:40:08  
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NO CLAIM TO ORIG. U.S. GOVT. WORKS.

Announcements:

New: HOUSTON POST (PAPERS) (File 639)  
New: EVENTLINE (File 165)

DIALOG system now available three more hours per week. See  
HELP SCHEDULE for more information.

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<  
>>> of new databases, price changes, etc. <<<  
>>> Announcements last updated 19jun90 <<<

File 1:ERIC \_ 66-90/MAY.  
\*\*\* LIMITS TO /ED TEMPORARILY NOT WORKING \*\*\*

Set	Items	Description
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b medicine

20jun90 08:40:24	User208700	Session A37.1
\$0.15	0.005 Hrs	File1
\$0.15	Estimated cost	File1
\$0.05	Dialnet	
\$0.20	Estimated cost	this search
\$0.20	Estimated total session cost	0.005 Hrs.

System:OS - DIALOG OneSearch

File 5:BIOSIS PREVIEWS\_69-90/MAY BA9001;RRM3901  
(C.BIOSIS 1990)

File 34:SCISEARCH \_ 1990 WK 1-22  
(COPR. ISI INC. 1990)

\* See also files 434 (1987-89), 433 (1980-86) & 432 (1974-79)  
\* Use 'BEGIN SCISEARCH' to search all of SciSearch  
\* File 34 (1989) has been rolled off into file 434. See ?news34

File 434:SCISEARCH \_ 1987-1989

\* See also file 34 (1990- ), 433 (1980-86) & 432 (1974-79)  
\*\*\* SORTS ARE NOT WORKING \*\*\*

File 433:SCISEARCH - 1980-1986  
(COPR. ISI INC. 1988)

\* See also file 34 (1990- ), 434 (1987-89) & 432 (1974-79)

File 432:SCISEARCH - 1974-1979  
(COPR. ISI INC. 1988)

\* See also file 34 (1990- ), 434 (1987-89) & 433 (1980-86)

File 48:SPORT DATABASE\_1977 - JUN 90  
(COPR. SIRC 1990)

File 72:EMBASE (EXCERPTA MEDICA)\_82-90/ISS24  
(COPR. ESP BV/EM 1990)

File 172:EMBASE (Excerpta Medica) 1980-81  
(Copr. ESP BV/EM 1984)

File 173:EMBASE (Excerpta Medica) 1974-79  
(Copr. ESP BV/EM 1984)

File 74:INTERNATIONAL PHARMACEUTICAL ABS. - 70-90/JUNE  
(COPR. ASHP 1990)

File 144:PASCAL\_1983 - 1990 MAR  
(C. INIST/CNRS 1990)

File 149:HEALTH PERIODICALS DATABASE\_1976-90/WEEK 24  
(COPR. IAC 1990)

\*\*\*\*\*  
\* Format 3 is now .20 for types and .40 for prints \*  
\* See ?RATES149 for more details \*  
\*\*\*\*\*

File 155:MEDLINE 66-90/AUG (9008W2)

File 157:AIDSLINE - 1980-90/JULY

File 159:Cancerlit - 1963-90/June

File 160:SMOKING AND HEALTH - 70-89/Dec  
\*\*\*\*\*

The problems in file 160 have been corrected now.  
Thank you for your patience.  
\*\*\*\*\*

File 218:Nursing & Allied Health (CINAHL)\_83-90/May  
(c. CINAHL Corp. 1990)

\*\*

File 219:Clinical Abstracts - Jan 81-89/Aug  
(Corp. Reference & Index Svcs.Inc.)

File 265:FEDERAL RESEARCH IN PROGRESS - MAY 1990

File 295:WORLD TRANSLATIONS INDEX 1984 - MAY 1990  
(COPR. ITC 1990)

Set	Items	Description
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s vascul?/ab and endothel?/ab and

>>>Term "AB" is not defined in one or more files

```
Processing
260315 VASCUL?/AB
101231 ENDOTHEL?/AB
S1 28166 VASCUL?/AB AND ENDOTHEL?/AB
s s1 and growth(w)factor/ab
```

>>>Term "AB" is not defined in one or more files

Processing

Processing

```
28166 S1
710456 GROWTH/AB
488266 FACTOR/AB
76978 GROWTH/AB(W)FACTOR/AB
S2 1873 S1 AND GROWTH(W)FACTOR/AB
s s2 not py=1990
```

>>>One or more prefixes are unsupported

>>> or undefined in one or more files.

```
1873 S2
527396 PY=1990
S3 1730 S2 NOT PY=1990
s s3 and vascular
```

```
1730 S3
521069 VASCULAR
S4 1663 S3 AND VASCULAR
s s4 and endothelial/ab
```

>>>Term "AB" is not defined in one or more files

```
1663 S4
77110 ENDOTHELIAL/AB
S5 1563 S4 AND ENDOTHELIAL/AB
```

>>>Possible typing error near end of command

s s5 and vascular/ab

>>>Term "AB" is not defined in one or more files

```
1563 S5
216805 VASCULAR/AB
S6 1547 S5 AND VASCULAR/AB
s s6 add vascular/ti and endothel?/ti
```

Processing

```
1547 S6
127561 VASCULAR/TI
57233 ENDOTHEL?/TI
S7 291 S6 AND VASCULAR/TI AND ENDOTHEL?/TI
s s7 not py=1989
```

Processing

>>>One or more prefixes are unsupported

>>> or undefined in one or more files.

```
291 S7
2113044 PY=1989
S8 198 S7 NOT PY=1989
rd s8
```

...examined 50 records (50)

...examined 50 records (100)

...examined 50 records (150)

...completed examining records

```
S9 122 RD S8 (unique items)
```

t s9/6/1-122

0019080289 BIOSIS Number: 87034425

THE EFFECT OF LYMPHOKINES ON GROWTH AND PHENOTYPE OF HUMAN VASCULAR  
ENDOTHELIAL CELLS

9/6/2 (Item 2 from file: 5)

0018600866 BIOSIS Number: 86045532

EPIDERMAL GROWTH FACTOR STIMULATES PROSTACYCLIN PRODUCTION BY CULTURED  
HUMAN VASCULAR ENDOTHELIAL CELLS

9/6/3 (Item 3 from file: 5)

0018109758 BIOSIS Number: 85055227

VASCULAR ENDOTHELIAL CELL GROWTH FACTOR IN WOUND HEALING THE SECOND  
REPORT THE SIGNIFICANCE OF EXTRACELLULAR MATRIX COMPOSED BY ENDOTHELIAL  
CELLS

9/6/4 (Item 4 from file: 5)

0018035912 BIOSIS Number: 85012770

HUMAN VASCULAR SMOOTH MUSCLE CELLS BOTH EXPRESS AND RESPOND TO  
HEPARIN-BINDING GROWTH FACTOR I ENDOTHELIAL CELL GROWTH FACTOR

9/6/5 (Item 5 from file: 5)

0017642435 BIOSIS Number: 84065642

INDUCTION BY FIBROBLAST GROWTH FACTOR OF ANGIOTENSIN CONVERTING ENZYME IN  
VASCULAR ENDOTHELIAL CELLS IN-VITRO

9/6/6 (Item 6 from file: 5)

0017543612 BIOSIS Number: 84020672

EVIDENCE OF THE PRESENCE OF A SPECIFIC VASCULAR ENDOTHELIAL GROWTH FACTOR  
IN FETAL BOVINE RETINA

9/6/7 (Item 7 from file: 5)

0016630402 BIOSIS Number: 82060874

POSSIBLE ROLE OF PROTEIN PHOSPHORYLATION IN THE MITOGENIC EFFECT OF HIGH  
DENSITY LIPOPROTEINS ON CULTURED VASCULAR ENDOTHELIAL CELLS

9/6/8 (Item 8 from file: 5)

0016169405 BIOSIS Number: 81079821

A MACROPHAGE FACTOR THAT STIMULATES THE PROLIFERATION OF VASCULAR  
ENDOTHELIAL CELLS

9/6/9 (Item 9 from file: 5)

0016053482 BIOSIS Number: 81022420

PURE BRAIN-DERIVED ACIDIC FIBROBLAST GROWTH FACTOR IS A POTENT ANGIOGENIC  
VASCULAR ENDOTHELIAL CELL MITOGEN WITH SEQUENCE HOMOLOGY TO INTERLEUKIN 1

9/6/10 (Item 10 from file: 5)

0016012052 BIOSIS Number: 81001510

A PLATELET FACTOR STIMULATING THE PROLIFERATION OF VASCULAR ENDOTHELIAL  
CELLS PARTIAL PURIFICATION AND CHARACTERIZATION

9/6/11 (Item 11 from file: 5)

0015212030 BIOSIS Number: 79102026

EFFECTS OF AN EXTRACT OF HUMAN BRAIN CONTAINING GROWTH FACTOR ACTIVITY ON  
THE PROLIFERATION OF HUMAN VASCULAR ENDOTHELIAL CELLS IN PRIMARY CULTURE

9/6/12 (Item 12 from file: 5)

0014337114 BIOSIS Number: 78073594

RAPID PURIFICATION AND ACTIVITY OF APO LIPO PROTEIN C-1 ON THE  
PROLIFERATION OF BOVINE VASCULAR ENDOTHELIAL CELLS IN-VITRO

9/6/13 (Item 13 from file: 5)

0014265785 BIOSIS Number: 78002265

HUMAN AND BOVINE VASCULAR ENDOTHELIAL CELLS COMPARATIVE EFFECT ON CELL  
GROWTH AND LONGEVITY OF AN EYE DERIVED GROWTH FACTOR AND OF EXTRACELLULAR  
MATRIX

9/6/14 (Item 14 from file: 5)  
0014233521 BIOSIS Number: 77066505  
✓ BOVINE BRAIN AND PITUITARY FIBROBLAST GROWTH FACTORS COMPARISON OF THEIR ABILITIES TO SUPPORT THE PROLIFERATION OF HUMAN AND BOVINE VASCULAR ENDOTHELIAL CELLS

9/6/15 (Item 15 from file: 5)  
0014208561 BIOSIS Number: 77041545  
PHOSPHATIDYL CHOLINE AND THE GROWTH IN SERUM-FREE MEDIUM OF VASCULAR ENDOTHELIAL AND SMOOTH MUSCLE CELLS AND CORNEAL ENDOTHELIAL CELLS

9/6/16 (Item 16 from file: 5)  
0013305383 BIOSIS Number: 76062875  
INTERACTION BETWEEN VASCULAR ENDOTHELIAL CELLS AND VASCULAR INTIMAL SPINDLE SHAPED CELLS IN-VITRO

9/6/17 (Item 17 from file: 5)  
0013203412 BIOSIS Number: 75053412  
VASCULAR ENDOTHELIAL CELL EFFECTORS IN FETAL CALF RETINA VITREOUS AND SERUM

9/6/18 (Item 18 from file: 5)  
0013191513 BIOSIS Number: 75041513  
SIGNALS CAUSING CHANGE IN MORPHOLOGICAL PHENOTYPE GROWTH MODE AND GENE EXPRESSION OF VASCULAR ENDOTHELIAL CELLS

9/6/19 (Item 19 from file: 5)  
0012286618 BIOSIS Number: 74059098  
FIBROBLAST GROWTH FACTOR MODULATES SYNTHESIS OF COLLAGEN IN CULTURED VASCULAR ENDOTHELIAL CELLS

9/6/20 (Item 20 from file: 5)  
0012235887 BIOSIS Number: 74008367  
MICRO CARRIER CULTURE OF VASCULAR ENDOTHELIAL CELLS ON SOLID PLASTIC BEADS

9/6/21 (Item 21 from file: 5)  
0011138252 BIOSIS Number: 71008244  
EFFECT OF HIGH AND LOW DENSITY LIPO PROTEINS ON PROLIFERATION OF CULTURED BOVINE VASCULAR ENDOTHELIAL CELLS

9/6/22 (Item 22 from file: 5)  
0011138191 BIOSIS Number: 71008183  
CONDITIONED MEDIUM FROM ENDOTHELIAL CELL CULTURES CAN RESTORE THE NORMAL PHENOTYPIC EXPRESSION OF VASCULAR ENDOTHELIUM MAINTAINED IN-VITRO IN THE ABSENCE OF OF FIBROBLAST GROWTH FACTOR

9/6/23 (Item 23 from file: 5)  
0010236095 BIOSIS Number: 70028591  
✓ STIMULATION OF HUMAN VASCULAR ENDOTHELIAL CELL GROWTH BY A PLATELET DERIVED GROWTH FACTOR AND THROMBIN

9/6/24 (Item 24 from file: 5)  
0010229186 BIOSIS Number: 70021682  
STRUCTURAL AND FUNCTIONAL ALTERATIONS IN THE SURFACE OF VASCULAR ENDOTHELIAL CELLS ASSOCIATED WITH THE FORMATION OF A CONFLUENT CELL MONO LAYER AND WITH THE WITHDRAWAL OF FIBROBLAST GROWTH FACTOR

9/6/25 (Item 25 from file: 5)  
0010167138 BIOSIS Number: 69042134  
VASCULAR ENDOTHELIAL CELLS MAINTAINED IN THE ABSENCE OF FIBROBLAST GROWTH FACTOR UNDERGO STRUCTURAL AND FUNCTIONAL ALTERATIONS THAT ARE INCOMPATIBLE WITH THEIR IN-VIVO DIFFERENTIATED PROPERTIES

9/6/26 (Item 26 from file: 5)  
0002265112 BIOSIS Number: 68065704

APPEARANCE IN CONFLUENT VASCULAR ENDOTHELIAL CELL MONO LAYERS OF A  
SPECIFIC CELL SURFACE PROTEIN CSP-60 NOT DETECTED IN ACTIVELY GROWING  
ENDOTHELIAL CELLS OR IN CELL TYPES GROWING IN MULTIPLE LAYERS

9/6/27 (Item 27 from file: 5)  
0009204528 BIOSIS Number: 68007032

THE PROLIFERATIVE RESPONSE IN-VITRO OF VASCULAR ENDOTHELIAL AND SMOOTH  
MUSCLE CELLS EXPOSED TO WOUND FLUIDS AND MACROPHAGES

9/6/28 (Item 28 from file: 5)  
0008188231 BIOSIS Number: 66000728

CONTROL OF PROLIFERATION OF BOVINE VASCULAR ENDOTHELIAL CELLS

9/6/29 (Item 29 from file: 5)  
0007136877 BIOSIS Number: 63031741

CLONAL GROWTH OF BOVINE VASCULAR ENDOTHELIAL CELLS FIBROBLAST GROWTH  
FACTOR AS A SURVIVAL AGENT

9/6/30 (Item 1 from file: 434)  
09271404 Number of References: 26

EVALUATION OF LONG-TERM CULTURED ENDOTHELIAL-CELLS AS A MODEL SYSTEM FOR  
STUDYING VASCULAR AGING

9/6/31 (Item 2 from file: 434)  
09246222 Number of References: 52

ENDOTHELIAL-LININGS IN PROSTHETIC VASCULAR GRAFTS

9/6/32 (Item 3 from file: 434)  
09191318 Number of References: 16

HUMAN-ENDOTHELIAL CELLS-INVITRO UNDER FLUID SHEAR-STRESS -  
PHARMACOLOGIC-INFLUENCES ON ADHERENCE AND NONTHROMBOGENITY OF VASCULAR  
ENDOTHELIAL-CELLS

9/6/33 (Item 4 from file: 434)  
09168882 Number of References: 37

ANTI-VASCULAR ENDOTHELIAL-CELL ANTIBODIES IN PATIENTS WITH IGA  
NEPHROPATHY - FREQUENCY AND CLINICAL-SIGNIFICANCE

9/6/34 (Item 5 from file: 434)  
09151806 Number of References: 33

RELATIVE CONTRIBUTION OF THE LEUKOCYTE MOLECULES MO1, LFA-1, AND P150,95  
(LEUM5) IN ADHESION OF GRANULOCYTES AND MONOCYTES TO VASCULAR ENDOTHELIUM  
IS TISSUE-SPECIFIC AND STIMULUS-SPECIFIC

9/6/35 (Item 6 from file: 434)  
09150456 Number of References: 40

INFLUENCE OF VASOACTIVE AGENTS ON CYTOPLASMIC FREE CALCIUM IN VASCULAR  
ENDOTHELIAL-CELLS

9/6/36 (Item 7 from file: 434)  
09140239 Number of References: 35

ACTIVITY OF PENTOSAN POLYSULFATE AND DERIVED COMPOUNDS ON VASCULAR  
ENDOTHELIAL-CELL PROLIFERATION AND MIGRATION INDUCED BY ACIDIC AND BASIC  
FGF INVITRO

9/6/37 (Item 8 from file: 434)  
09110870 Number of References: 24

ADDITIVE EFFECTS OF IL-1 AND TNF ON INDUCTION OF PROSTACYCLIN SYNTHESIS  
IN HUMAN VASCULAR ENDOTHELIAL-CELLS

9/6/38 (Item 9 from file: 434)  
09056303 Number of References: 47

IDENTIFICATION OF THE FIBROBLAST GROWTH-FACTOR RECEPTOR IN HUMAN VASCULAR  
ENDOTHELIAL-CELLS

9/6/39 (Item 10 from file: 434)



08986667 Number of References: 39

DIRECT CYTO-TOXIC ACTION OF SHIGA TOXIN ON HUMAN VASCULAR  
ENDOTHELIAL-CELLS

9/6/40 (Item 11 from file: 434)

08736857 Number of References: 49

CYTOKINE ACTIVATION OF VASCULAR ENDOTHELIUM - EFFECTS ON TISSUE-TYPE  
PLASMINOGEN-ACTIVATOR AND TYPE-1 PLASMINOGEN-ACTIVATOR INHIBITOR

9/6/41 (Item 12 from file: 434)

08543094 Number of References: 53

EXPRESSION OF GENES FOR PLATELET-DERIVED GROWTH-FACTOR IN ADULT HUMAN  
VENOUS ENDOTHELIUM - A POSSIBLE NON-PLATELET-DEPENDENT CAUSE OF INTIMAL  
HYPERPLASIA IN VEIN GRAFTS AND PERIANASTOMOTIC AREAS OF VASCULAR PROSTHESES

9/6/42 (Item 13 from file: 434)

08509305 Number of References: 17

THE ADHERENCE OF CANDIDA YEASTS TO HUMAN AND BOVINE VASCULAR ENDOTHELIUM  
AND SUBENDOTHELIAL EXTRACELLULAR-MATRIX

9/6/43 (Item 14 from file: 434)

08507009 Number of References: 32

ENDOTHELIAL-CELL SEEDING OF POLYTETRAFLUOROETHYLENE VASCULAR GRAFTS IN  
HUMANS - A PRELIMINARY-REPORT

9/6/44 (Item 15 from file: 434)

08409446 Number of References: 42

REGULATION OF VASCULAR SMOOTH-MUSCLE CELL-GROWTH BY  
ENDOTHELIAL-SYNTHESIZED EXTRACELLULAR MATRICES

9/6/45 (Item 16 from file: 434)

08373254 Number of References: 19

HEPARAN-SULFATE AND HEPARIN AS A POTENTIATOR OR A SUPPRESSOR OF GROWTH OF  
NORMAL AND TRANSFORMED VASCULAR ENDOTHELIAL-CELLS

9/6/46 (Item 17 from file: 434)

08369742 Number of References: 46

REGULATION OF PAF-ACETHER (PLATELET-ACTIVATING FACTOR) BIOSYNTHESIS IN  
CULTURED HUMAN VASCULAR ENDOTHELIAL-CELLS STIMULATED WITH THROMBIN

9/6/47 (Item 18 from file: 434)

08353333 Number of References: 16

IDENTIFICATION OF HUMAN VASCULAR ENDOTHELIAL-CELL MONOCYTE ANTIGENIC  
SYSTEM USING MONOCLONAL-ANTIBODIES

9/6/48 (Item 19 from file: 434)

08212112 Number of References: 65

ROLE OF RECEPTORS IN METABOLIC INTERACTION OF HISTAMINE WITH HUMAN  
VASCULAR ENDOTHELIAL-CELLS AND SKIN FIBROBLASTS - AN ORDERED SEQUENCE OF  
ENZYME ACTION

9/6/49 (Item 20 from file: 434)

08119371 Number of References: 31

HETEROGENEITY OF MOUSE VASCULAR ENDOTHELIUM - INVITRO STUDIES OF  
LYMPHATIC, LARGE BLOOD-VESSEL AND MICROVASCULAR ENDOTHELIAL-CELLS

9/6/50 (Item 21 from file: 434)

08067834 Number of References: 49

REGULATION OF INSULIN-RECEPTOR INTERNALIZATION IN VASCULAR  
ENDOTHELIAL-CELLS BY INSULIN AND PHORBOL ESTER

9/6/51 (Item 22 from file: 434)

08058895 Number of References: 32

NEUTROPHIL-MEDIATED PROTECTION OF CULTURED HUMAN VASCULAR  
ENDOTHELIAL-CELLS FROM DAMAGE BY GROWING CANDIDA-ALBICANS HYPHAE

9/6/52 (Item 23 from file: 434)  
08054463 Number of References: 37  
INVITRO ENDOTHELIALIZATION OF SMALL-CALIBER VASCULAR GRAFTS

9/6/53 (Item 24 from file: 434)  
08008223 Number of References: 9  
ADULT HUMAN VASCULAR ENDOTHELIAL-CELL ATTACHMENT AND MIGRATION ON NOVEL BIOABSORBABLE POLYMERS

9/6/54 (Item 25 from file: 434)  
07990381 Number of References: 32  
VASCULAR LIPOXYGENASE ACTIVITY - SYNTHESIS OF 15-HYDROXYEICOSATETRAENOIC ACID FROM ARACHIDONIC-ACID BY BLOOD-VESSELS AND CULTURED VASCULAR ENDOTHELIAL-CELLS

9/6/55 (Item 26 from file: 434)  
07849537 Number of References: 32  
EFFECT OF HYPERCHOLESTEROLEMIA ON VASCULAR REACTIVITY IN THE RABBIT .2. INFLUENCE OF TREATMENT WITH DIPYRIDAMOLE ON ENDOTHELIUM-DEPENDENT AND ENDOTHELIUM-INDEPENDENT RESPONSES IN ISOLATED AORTAS OF CONTROL AND HYPERCHOLESTEROLEMIC RABBITS

9/6/56 (Item 1 from file: 433)  
07710710 Number of References: 34  
DIFFERENT EFFECTS OF ASPIRIN, DIPYRIDAMOLE AND UD-CG 115 ON PLATELET ACTIVATION IN A MODEL OF VASCULAR INJURY - STUDIES WITH EXTRACELLULAR-MATRIX COVERED WITH ENDOTHELIAL-CELLS

9/6/57 (Item 2 from file: 433)  
07702568 Number of References: 61  
METHODS IN LABORATORY INVESTIGATION - INBRED GUINEA-PIG AORTIC ENDOTHELIAL-CELL CLONES - MODEL FOR STUDYING THE VASCULAR ENDOTHELIUM UNDER TOTALLY ISOLOGOUS CONDITIONS

9/6/58 (Item 3 from file: 433)  
07685330 Number of References: 39  
PLASMALEMMAL PROTEINS OF CULTURED VASCULAR ENDOTHELIAL-CELLS EXHIBIT APICAL BASAL POLARITY - ANALYSIS BY SURFACE-SELECTIVE IODINATION

9/6/59 (Item 4 from file: 433)  
07678612 Number of References: 47  
2 MONOKINES, INTERLEUKIN-1 AND TUMOR NECROSIS FACTOR, RENDER CULTURED VASCULAR ENDOTHELIAL-CELLS SUSCEPTIBLE TO LYSIS BY ANTIBODIES CIRCULATING DURING KAWASAKI SYNDROME

9/6/60 (Item 5 from file: 433)  
07668279 Number of References: 36  
RECONSTITUTION OF THE VASCULAR WALL INVITRO - A NOVEL MODEL TO STUDY INTERACTIONS BETWEEN ENDOTHELIAL AND SMOOTH-MUSCLE CELLS.

9/6/61 (Item 6 from file: 433)  
07663236 Number of References: 2  
CULTURED HUMAN VASCULAR ENDOTHELIAL-CELLS EXPRESS THE A-CHAIN OF PDGF

9/6/62 (Item 7 from file: 433)  
07649430 Number of References: 31  
THE CYTO-TOXIC EFFECT OF SURGICAL GLOVE POWDER PARTICLES ON ADULT HUMAN VASCULAR ENDOTHELIAL-CELL CULTURES - IMPLICATIONS FOR CLINICAL USES OF TISSUE-CULTURE TECHNIQUES

9/6/63 (Item 8 from file: 433)  
07626413 Number of References: 29  
USE OF TRITIATED-THYMIDINE AS A MARKER TO COMPARE THE EFFECTS OF MATRIX PROTEINS ON ADULT HUMAN VASCULAR ENDOTHELIAL-CELL ATTACHMENT - IMPLICATIONS FOR SEEDING OF VASCULAR PROSTHESES

9/6/64 (Item 9 from file: 433)  
07619687 Number of References: 15  
THYROID-HORMONES AND VASCULAR REACTIVITY - ROLE OF THE ENDOTHELIAL-CELL

9/6/65 (Item 10 from file: 433)  
07581768 Number of References: 43  
COMPARATIVE STUDIES ON INSULIN-LIKE GROWTH FACTOR-II AND INSULIN  
PROCESSING BY VASCULAR ENDOTHELIAL-CELLS

9/6/66 (Item 11 from file: 433)  
07573634 Number of References: 35  
PROSTACYCLIN EXPRESSION BY A CONTINUOUS HUMAN CELL-LINE DERIVED FROM  
VASCULAR ENDOTHELIUM

9/6/67 (Item 12 from file: 433)  
07541572 Number of References: 23  
ADULT HUMAN-ENDOTHELIAL CELL COVERAGE OF SMALL-CALIBER DACRON AND  
POLYTETRAFLUOROETHYLENE VASCULAR PROSTHESES INVITRO

9/6/68 (Item 13 from file: 433)  
07514053 Number of References: 26  
ENDOTHELIAL-CELL HARVEST FOR SEEDING VASCULAR PROSTHESES - THE INFLUENCE  
OF TECHNIQUE ON CELL-FUNCTION, VIABILITY, AND NUMBER

9/6/69 (Item 14 from file: 433)  
07476785 Number of References: 78  
CURRENT CONCEPTS OF VASCULAR ENDOTHELIAL AND SMOOTH-MUSCLE CELL  
COMMUNICATION

9/6/70 (Item 15 from file: 433)  
07458078 Number of References: 11  
USE OF FRESHLY ISOLATED CAPILLARY ENDOTHELIAL-CELLS FOR THE IMMEDIATE  
ESTABLISHMENT OF A MONOLAYER ON A VASCULAR GRAFT AT SURGERY

9/6/71 (Item 16 from file: 433)  
07458077 Number of References: 17  
MIGRATION OF ADULT HUMAN VASCULAR ENDOTHELIAL-CELLS - EFFECT OF  
EXTRACELLULAR-MATRIX PROTEINS

9/6/72 (Item 17 from file: 433)  
07442491 Number of References: 29  
REGULATION OF THE FIBRINOLYTIC SYSTEM OF CULTURED HUMAN VASCULAR  
ENDOTHELIUM BY INTERLEUKIN-1

9/6/73 (Item 18 from file: 433)  
07397111 Number of References: 57  
THE ISOLATION AND CULTURE OF ENDOTHELIAL-CELLS AND PERICYTES FROM THE  
BOVINE RETINAL MICROVASCULATURE - A COMPARATIVE-STUDY WITH LARGE VESSEL  
VASCULAR CELLS

9/6/74 (Item 19 from file: 433)  
07389665 Number of References: 34  
PLATELET ACTIVATING FACTOR ALTERS CALCIUM HOMEOSTASIS IN CULTURED  
VASCULAR ENDOTHELIAL-CELLS

9/6/75 (Item 20 from file: 433)  
07385942 Number of References: 59  
DIFFERENTIAL ADHESIVENESS OF RHABDOMYOSARCOMA-DERIVED CLONED METASTATIC  
CELL-LINES TO VASCULAR ENDOTHELIAL MONOLAYERS

9/6/76 (Item 21 from file: 433)  
07370619 Number of References: 26  
ACTIONS OF TUMOR NECROSIS FACTOR ON CULTURED VASCULAR ENDOTHELIAL-CELLS -  
MORPHOLOGIC MODULATION, GROWTH-INHIBITION, AND CYTO-TOXICITY

9/6/77 (Item 22 from file: 433)

07357255      Number of References: 47

RECOMBINANT TUMOR NECROSIS FACTOR INDUCES PROCOAGULANT ACTIVITY IN  
CULTURED HUMAN VASCULAR ENDOTHELIUM - CHARACTERIZATION AND COMPARISON WITH  
THE ACTIONS OF INTERLEUKIN-1

9/6/78      (Item 23 from file: 433)

07316080      Number of References: 27

USE OF AN ENDOTHELIAL MONOLAYER ON A VASCULAR GRAFT PRIOR TO IMPLANTATION  
- TEMPORAL DYNAMICS AND COMPATIBILITY WITH THE OPERATING-ROOM

9/6/79      (Item 24 from file: 433)

07296790      Number of References: 23

SHORT-TERM AND LONG-TERM INTERACTIONS OF ENDOTHELIUM AND VASCULAR  
SMOOTH-MUSCLE IN COCULTURE - EFFECTS ON CYCLIC-GMP PRODUCTION

9/6/80      (Item 25 from file: 433)

07255507      Number of References: 35

IMMUNOGLOBULIN-M ANTIBODIES PRESENT IN THE ACUTE PHASE OF KAWASAKI  
SYNDROME LYSE CULTURED VASCULAR ENDOTHELIAL-CELLS STIMULATED BY GAMMA  
INTERFERON

9/6/81      (Item 26 from file: 433)

07226193      Number of References: 31

RECOMBINANT TUMOR NECROSIS FACTOR AND IMMUNE INTERFERON ACT SINGLY AND IN  
COMBINATION TO REORGANIZE HUMAN VASCULAR ENDOTHELIAL-CELL MONOLAYERS

9/6/82      (Item 27 from file: 433)

07210313      Number of References: 96

ENDOTHELIAL-CELL INFLUENCES ON VASCULAR SMOOTH-MUSCLE PHENOTYPE

9/6/83      (Item 28 from file: 433)

07169416      Number of References: 29

COMPARATIVE-STUDY OF ANTITHROMBIN-III PROTEASE COMPLEX METABOLISM BY  
FIBROBLASTS AND VASCULAR ENDOTHELIAL-CELLS

9/6/84      (Item 29 from file: 433)

07161439      Number of References: 18

THE EFFECT OF FLOW ON VASCULAR ENDOTHELIAL-CELLS GROWN IN TISSUE-CULTURE  
ON POLYTETRAFLUOROETHYLENE GRAFTS

9/6/85      (Item 30 from file: 433)

07126177      Number of References: 30

ELONGATION OF ARACHIDONIC AND EICOSAPENTAENOIC ACIDS LIMITS THEIR  
AVAILABILITY FOR THROMBIN-STIMULATED RELEASE FROM THE GLYCEROLIPIDS OF  
VASCULAR ENDOTHELIAL-CELLS

9/6/86      (Item 31 from file: 433)

07108092      Number of References: 35

2 DISTINCT MONOKINES, INTERLEUKIN-1 AND TUMOR NECROSIS FACTOR, EACH  
INDEPENDENTLY INDUCE BIOSYNTHESIS AND TRANSIENT EXPRESSION OF THE SAME  
ANTIGEN ON THE SURFACE OF CULTURED HUMAN VASCULAR ENDOTHELIAL-CELLS

9/6/87      (Item 32 from file: 433)

07068690      Number of References: 49

INHIBITION OF VASCULAR ENDOTHELIAL-CELL GROWTH AND TRYPSIN ACTIVITY BY  
VITREOUS

9/6/88      (Item 33 from file: 433)

07058703      Number of References: 50

SUBENDOTHELIAL PROTEINS AND PLATELET-ADHESION - VONWILLEBRAND-FACTOR AND  
FIBRONECTIN, NOT THROMBOSPONDIN, ARE INVOLVED IN PLATELET-ADHESION TO  
EXTRACELLULAR-MATRIX OF HUMAN VASCULAR ENDOTHELIAL-CELLS

9/6/89      (Item 34 from file: 433)

07058252      Number of References: 26

RECOMBINANT HUMAN TUMOR NECROSIS FACTOR INCREASES MESSENGER RNA LEVELS

AND SURFACE EXPRESSION OF HLA-A,B ANTIGENS IN VASCULAR ENDOTHELIAL-CELLS  
AND DERMAL FIBROBLASTS INVITRO

9/6/90 (Item 35 from file: 433)  
07056478 Number of References: 33

INCREASED VASCULAR CONTRACTION AND SENSITIVITY TO NOREPINEPHRINE AFTER  
ENDOTHELIAL DENUATION IS INHIBITED BY PRAZOSIN

9/6/91 (Item 36 from file: 433)  
07029040 Number of References: 31

CULTURED HUMAN VASCULAR ENDOTHELIAL-CELLS ACQUIRE ADHESIVENESS FOR  
NEUTROPHILS AFTER STIMULATION WITH INTERLEUKIN-1, ENDOTOXIN, AND  
TUMOR-PROMOTING PHORBOL DIESTERS

9/6/92 (Item 37 from file: 433)  
07023085 Number of References: 0

A GROWTH-FACTOR FROM SARCOID MACROPHAGE-EPITHELIOID CELLS THAT STIMULATES  
PROLIFERATION OF VASCULAR ENDOTHELIAL-CELLS - PARTIAL-PURIFICATION AND  
CHARACTERIZATION

9/6/93 (Item 38 from file: 433)  
06877631 Number of References: 30

METHODS IN LABORATORY INVESTIGATION - REVERSIBLE MICROCARRIER-MEDIATED  
JUNCTIONAL COMMUNICATION BETWEEN ENDOTHELIAL AND SMOOTH-MUSCLE CELL  
MONOLAYERS - AN INVITRO MODEL OF VASCULAR CELL-INTERACTIONS

9/6/94 (Item 39 from file: 433)  
06859260 Number of References: 40

THE ANTIPROLIFERATIVE EFFECT OF INTERFERON AND THE MITOGENIC ACTIVITY OF  
GROWTH-FACTORS ARE INDEPENDENT CELL-CYCLE EVENTS - STUDIES WITH VASCULAR  
SMOOTH-MUSCLE CELLS AND ENDOTHELIAL-CELLS

9/6/95 (Item 40 from file: 433)  
06501967 Number of References: 0

FAMILIAL OCCURRENCE OF MULTIPLE CEREBRAL VASCULAR MALFORMATIONS - ABSENCE  
OF CIRCULATING ENDOTHELIAL GROWTH-FACTOR

9/6/96 (Item 41 from file: 433)  
06461038 Number of References: 22

VASCULAR SMOOTH-MUSCLE CELLS INHIBIT THE PLASMINOGEN ACTIVATORS SECRETED  
BY ENDOTHELIAL-CELLS

9/6/97 (Item 42 from file: 433)  
06406267 Number of References: 0

GROWTH-FACTOR FROM SARCOID MACROPHAGE-EPITHELIOID CELLS THAT STIMULATES  
PROLIFERATION OF VASCULAR ENDOTHELIAL-CELLS

9/6/98 (Item 43 from file: 433)  
06269215 Number of References: 14

A PLATELET FACTOR THAT STIMULATES THE PROLIFERATION OF VASCULAR  
ENDOTHELIAL-CELLS

9/6/99 (Item 44 from file: 433)  
05760369 Number of References: 18

IMMUNOLOGICAL INJURY TO VASCULAR ENDOTHELIAL-CELLS - EFFECTS ON RELEASE  
OF PROSTACYCLIN

9/6/100 (Item 45 from file: 433)  
05730990 Number of References: 17

MONOCLONAL ANTI-HUMAN MONOCYTE ANTIBODIES OKM1 AND OKM5 POSSESS  
DISTINCTIVE TISSUE DISTRIBUTIONS INCLUDING DIFFERENTIAL REACTIVITY WITH  
VASCULAR ENDOTHELIUM

9/6/101 (Item 46 from file: 433)  
05602419 Number of References: 23

INDUCTION OF HUMAN VASCULAR ENDOTHELIAL STRESS FIBERS BY FLUID

# SHEAR-STRESS

9/6/102 (Item 47 from file: 433)

05556007 Number of References: 34

INTERFERON ENHANCES PROSTACYCLIN PRODUCTION BY CULTURED VASCULAR  
ENDOTHELIAL-CELLS

9/6/103 (Item 48 from file: 433)

05549440 Number of References: 36

HUMAN AND BOVINE VASCULAR ENDOTHELIAL-CELLS - COMPARATIVE EFFECT ON  
CELL-GROWTH AND LONGEVITY OF AN EYE-DERIVED GROWTH-FACTOR (EDGF) AND OF  
EXTRACELLULAR-MATRIX

9/6/104 (Item 49 from file: 433)

05056582 Number of References: 177

THE VASCULAR ENDOTHELIAL SYSTEM

9/6/105 (Item 50 from file: 433)

03531024 Number of References: 0

FIBROBLAST GROWTH-FACTOR MAINTAINS THE PHENOTYPIC-EXPRESSION OF  
COLLAGEN-SYNTHESIS IN CULTURED BOVINE VASCULAR ENDOTHELIAL-CELLS

9/6/106 (Item 51 from file: 433)

03253437 Number of References: 58

STRUCTURAL AND FUNCTIONAL ALTERATIONS IN THE SURFACE OF VASCULAR  
ENDOTHELIAL-CELLS ASSOCIATED WITH THE FORMATION OF A CONFLUENT CELL  
MONOLAYER AND WITH THE WITHDRAWAL OF FIBROBLAST GROWTH-FACTOR

9/6/107 (Item 1 from file: 432)

02497634 Number of References: 0

STIMULATION OF HUMAN VASCULAR ENDOTHELIAL CELL-GROWTH BY A  
PLATELET-DERIVED GROWTH-FACTOR AND ITS POTENTIATION BY THROMBIN

9/6/108 (Item 2 from file: 432)

02055995 Number of References: 37

CONTROL OF PROLIFERATION OF HUMAN VASCULAR ENDOTHELIAL CELLS -  
CHARACTERIZATION OF RESPONSE OF HUMAN UMBILICAL VEIN ENDOTHELIAL CELLS TO  
FIBROBLAST GROWTH-FACTOR, EPIDERMAL GROWTH-FACTOR, AND THROMBIN

9/6/109 (Item 1 from file: 72)

07225961 EMBASE No: 88226407

Vascular endothelial cells and hematopoietic regulation

9/6/110 (Item 2 from file: 72)

5652356 EMBASE No: 84148022

Adult human saphenous vein endothelial cells: Assessment of their  
reproductive capacity for use in endothelial seeding of vascular prostheses

9/6/111 (Item 3 from file: 72)

5651891 EMBASE No: 84147557

Rapid purification and activity of apolipoprotein Csub 1 on the  
proliferation of bovine vascular endothelial cells in vitro

9/6/112 (Item 4 from file: 72)

5553362 EMBASE No: 84049028

Role of the platelet in maintaining the integrity of the vascular  
endothelial cell

9/6/113 (Item 5 from file: 72)

5019323 EMBASE No: 82019862

Microcarrier culture of vascular endothelial cells on solid plastic beads

9/6/114 (Item 6 from file: 72)

5010965 EMBASE No: 82011209

High density lipoproteins and the growth of vascular endothelial cells in  
serum-free medium

9/6/115 (Item 1 from file: 172)

80024532 0050480601966

Studies on atherogenesis and corneal transplantation using cultured vascular and corneal endothelia

9/6/116 (Item 1 from file: 173)

78154468

Factors from 3T3 cells stimulate proliferation of cultured vascular endothelial cells

9/6/117 (Item 2 from file: 173)

78039219

Localization of bovine brain filament antibody on intermediate (100 Angstrom) filaments in guinea pig vascular endothelial cells and chick cardiac muscle cells

9/6/118 (Item 1 from file: 155)

05279713 84203713

Rapid purification and activity of apolipoprotein C1 on the proliferation of bovine vascular endothelial cells in vitro.

9/6/119 (Item 2 from file: 155)

04644566 82187566

Microcarrier cultures in vascular endothelial research.

9/6/120 (Item 3 from file: 155)

03824786 79201786

Appearance in confluent vascular endothelial cell monolayers of a specific cell surface protein (CSP-60) not detected in actively growing endothelial cells or in cell types growing in multiple layers.

9/6/121 (Item 1 from file: 159)

0445081 87735157 ICDB/87033165

EARLY RADIATION INDUCED METABOLIC CHANGES IN CULTURED VASCULAR ENDOTHELIAL CELLS (MEETING ABSTRACT)

9/6/122 (Item 2 from file: 159)

0173270 80227002 ICDB/80045091

CULTURED VASCULAR ENDOTHELIAL CELLS AS A MODEL SYSTEM FOR THE STUDY OF CELLULAR SENESCENCE

s vascular/ti and endothelial/ab and growth(w)factor/ti

Processing

Processing

Processing

127561 VASCULAR/TI

37461 ENDOTHELIAL/TI

446982 GROWTH/TI

263001 FACTOR/TI

53821 GROWTH/TI(W)FACTOR/TI

S10 155 VASCULAR/TI AND ENDOTHELIAL/TI AND GROWTH(W)FACTOR/TI

display sets

Set	Items	Description
S1	20136	VASCUL?/AB AND ENDOTHEL?/AB
S2	1873	S1 AND GROWTH(W)FACTOR/AB
S3	1730	S2 NOT PY=1990
S4	1663	S3 AND VASCULAR
S5	1563	S4 AND ENDOTHELIAL/AB
S6	1547	S5 AND VASCULAR/AB
S7	291	S6 AND VASCULAR/TI AND ENDOTHEL?/TI
S8	198	S7 NOT PY=1989
S9	122	RD S8 (unique items)
S10	155	VASCULAR/TI AND ENDOTHELIAL/TI AND GROWTH(W)FACTOR/TI